

IN THE CLAIMS:

1. (currently amended) A method of providing a fair exchange of messages to players of a distributed real-time multi-player game taking place over a communications network, said method comprising the steps of:

sending update messages generated by a game server toward said players, each update message having a respective update message number associated therewith;

receiving action messages from said players, wherein each action message received from a player comprises an indication of an update message with which the action message is associated and a reaction time associated with the action message, said reaction time being a difference between a reception time of the update message received for the player and a sending time of the action message sent by the player in response to the update message;

computing, for each received action message, a respective delivery time for use in delivering the action message for processing by the game server, wherein one of a plurality of delivery time ~~formula~~ formulas is utilized for the action message ~~is utilized~~ depending on whether the action messages arrive in order and whether the action messages arrive within their wait timeout periods; the plurality of delivery time ~~formula~~ formulas comprising a first delivery time formula utilized when the action messages arrive in order and within their wait timeout periods, a second delivery time formula utilized when the action messages arrive out of order but within their wait timeout periods, and a third delivery time formula utilized when the action messages arrive outside their wait timeout periods; wherein a wait timeout period for a player is calculated based on an expected round trip time between a game server proxy and a player ~~proxy~~; proxy, wherein the game server proxy is operable in connection with said game ~~server~~, server and the player proxy is operable in connection with said ~~player~~, player;

queuing, in real-time, each received action message for use in delivering the action message for processing by the game server, wherein the queued action messages are arranged in an order of increasing update message number and are further arranged for each update message in an order of increasing reaction time; and

delivering, in real-time, said queued action messages for processing by said game server.